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MADISON RIVER RECREATION STUDY

SUMMARY TABLES FOR FLOAT FISHERMEN INTERVIEWED BETWEEN WOLF CREEK AND McATEE BRIDGE

USE SEASON - SUMMER 1981

COOPERATING PARTIES

DEPARTMENT OF GEOGRAPHY
NORTH TEXAS STATE UNIVERSITY
DENTON, TEXAS 76203

MONTANA DEPARTMENT OF FISH
WILDLIFE AND PARKS
REGION 3
8695 HUFFINE ROAD
BOZEMAN, MONTANA 59715

BUREAU OF LAND MANAGEMENT
BUTTE DISTRICT
P.O. BOX 3388
BUTTE, MONTANA 59701

INTRODUCTION

The Madison River Recreation Project was a cooperative research effort involving the Montana Department of Fish, Wildlife, and Parks, the U.S.D.I. Bureau of Land Management, and North Texas State University. The objective of the study was to obtain information on recreational use and visitor attitudes toward management techniques on the Madison River, Montana.

This report summarizes the response to both an on-site and follow-up mail survey of visitors to the Madison River during the summer use season (May-August) 1981.

During that period 452 float anglers were contacted and subsequently sent a detailed questionnaire. Of that group, 450 received the questionnaire; 347 people returned the form for a 76% useable response rate.

This report is organized into a series of tables which summarize user response to the on-site registration card and questionnaire.

DEFINITIONS

Number (N) = the number of respondents. Total N's may not equal 347 due to the fact that not all people respond to every question.

Commercially Outfitted = respondents guided by professional outfitters.

Rented = respondents who rented equipment from professional outfitters but did not have the services of a professional guide while engaging in a given recreational activity.

Privately Outfitted = respondents using privately owned equipment and not guided by professional outfitters.

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PART I

CHARACTERISTICS OF RIVER TRIP AND RIVER VISITORS

Table 1
STATE OF RESIDENCE FOR RESPONDENT

State	# of Respondents
California	76
Montana	75
Colorado	36
Utah	15
Texas	13
Idaho	13
New Jersey	12
Arizona	9
Nevada	8
Oregon	8
Pennsylvania	8
Wisconsin	7
Washington	6
Illinois	6
Georgia	6
Minnesota	5
New York	5
North Carolina	4
Indiana	4
Michigan	4
Wyoming	4
Connecticut	3
Ohio	3
Oklahoma	3
Massachusetts	2
District of Columbia	2
Kansas	2
Nebraska	2
Maryland	1
Virginia	1
South Carolina	1
Iowa	1
North Dakota	1
Louisiana	1
	N=347

Table 2
MONTH RESPONDENT CONTACTED ON-SITE

Month	Frequency	Percent
May	8	2.4
June	65	19.6
July	153	46.2
August	105	31.8
	N=331	100.0

Table 3
LOCATION OF INTERVIEW

Location	Frequency	Percent
McAtee	45	13.0
Palisades	113	32.8
Wolf Creek	156	45.2
Trout Area	5	1.4
S. Madison	14	4.1
Kelly Bridge	5	1.4
Ruby Creek	5	1.4
W. Yellowstone	2	.7
	N=345	100.0

Table 4
PUT-IN LOCATIONS

Location	Frequency	Percent
Wolf Creek	188	54.5
Kelley Bridge	11	3.2
Palisades	126	36.5
McAtee	6	1.7
Trout Area	3	0.9
West Fork	1	0.3
Ruby Creek	6	1.7
S. Madison	4	1.2
	N=345	100.0

Table 5
TAKE-OUT LOCATIONS

Location	Frequency	Percent
McAtee	234	67.6
Varney	79	22.8
Ennis	3	0.9
Valley Gard	4	1.2
Ruby Creek	1	0.3
Cameron Flat	3	0.9
Schumaker	22	6.3
	N=346	100.0

Table 6
PRIMARY WATERCRAFT

Craft Type	Frequency	Percent
McKenzie	250	77.6
Raft	43	13.3
John Boat	12	3.8
Lauro	10	3.2
Canoe	3	0.9
V-Boat	3	0.9
Slide Rite	1	0.3
	N=322	100.0

Table 7
EQUIPMENT OWNERSHIP

Ownership	Frequency	Percent
Commercially Outfitted	230	66.3
Rented	6	1.7
Privately Outfitted	111	32.0
	N=347	100.0

Table 8
GROUP SIZE

Group Size	Frequency	Percent
2 - 3	218	65.5
4 - 6	84	25.2
7 - 9	21	6.3
10+	10	3.0
	N=333	100.0

Table 9
CAMPING ON RIVER

Camping	Frequency	Percent
Yes	44	12.9
No	297	87.1
	N=341	100.0

Table 10
CAMPSITE LOCATION

Location	Frequency	Percent
Varney	8	19.0
W. Madison	4	9.4
Trout Area	7	16.7
Ruby Creek	7	16.7
Henry Fork	6	14.3
Palisades	6	14.3
Lion Bridge	1	2.4
Cliff Bridge	1	2.4
Bakers Hole	1	2.4
Beaverhead	1	2.4
	N=42	100.0

TABLE 11
RESPONDENTS FIRST VISIT TO MADISON RIVER

First Visit	Frequency	Percent
Yes	127	36.5
No	220	63.4
	347	100.0

TABLE 12
FREQUENCY OF VISITATION PER YEAR

Number of Visits	Frequency	Percent
1	70	31.6
2	44	19.9
3	21	9.5
4	10	4.5
5	3	1.3
6-10	15	6.7
11+	59	26.5
	182 1045 Ave 5.74 days	100.0

TABLE 13
LENGTH OF RIVER VISIT

Days	Frequency	Percent
1	94	27.7
2	50	14.7
3-5	100	29.6
6-10	41	12.1
11+	54	15.9
	339	100.0

PART II

PERCEPTIONS OF CROWDING

TABLE 15
EXPECTATIONS OF MEETING OTHER USERS

CATEGORIES	CATEGORY RANK
Far Fewer Than Expected	1
Fewer Than Expected	2
About What I Expected	3
More Than I Expected	4
Far More Than Expected	5
Had no Expectations	6

TABLE 16
DESIRED ENCOUNTER LEVELS WITH OTHER USERS

CATEGORIES	CATEGORY RANK
Alot More People	1
A Few More People	2
Neither Fewer Nor More People	3
A Few Less People	4
Far Fewer People	5

TABLE 14A
ESTIMATED NUMBER OF PEOPLE SEEN BY FLOAT FISHERMEN

People Observed at Put-In

Number of People Seen	Frequency	Percent
0	12	3.8
1-2	13	4.0
3-5	51	15.9
6-10	132	41.3
11-15	61	19.1
16-20	29	9.0
21-25	8	2.5
26-50	14	4.4
	320	100.0

Mean 10.4
St. Dev. 7.99

TABLE 14B
ESTIMATED NUMBER OF PEOPLE SEEN BY FLOAT FISHERMEN

People Observed at Take-Out

Number of People Seen	Frequency	Percent
0	28	8.7
1-2	16	5.1
3-5	83	26.2
6-10	111	35.1
11-15	47	14.7
16-20	16	5.1
21-25	3	1.0
26-50	10	3.1
51+	2	1.0
	316	100.0

Mean 8.5
St. Dev. 9.02

TABLE 14C
ESTIMATED NUMBERS OF PEOPLE SEEN BY FLOAT FISHERMEN

Float Fishermen Observed

	Number of People Seen	Frequency	Percent
	0	5	1.5
	1-2	13	3.9
	3-5	36	11.0
	6-10	120	36.9
	11-15	59	18.2
	16-20	42	12.8
	21-25	18	5.5
	26-50	32	9.8
	51+	1	0.4
Mean	13.3	326	100.0
St. Dev.	10.0		

TABLE 14D
ESTIMATED NUMBERS OF PEOPLE SEEN BY FLOAT FISHERMEN

Bank Fishermen Observed

	Number of People Seen	Frequency	Percent
	0	47	14.5
	1-2	58	17.9
	3-5	88	27.2
	6-10	78	24.1
	11-15	27	8.3
	16-20	10	3.1
	21-25	5	1.5
	26-50	9	2.8
	51+	2	0.6
Mean	6.9	324	
St. Dev.	9.4		

TABLE 14E
ESTIMATED NUMBER OF PEOPLE SEEN BY FLOAT FISHERMEN

Recreational Boaters Observed

Number of People Seen	Frequency	Percent
0	186	62.7
1-2	45	15.2
3-4	33	11.1
6-10	20	6.8
11-15	4	1.3
16-20	6	2.0
21-25	2	0.6
26-50	1	0.3
51+	0	0.0
Mean 2.0	296	100.0
St. Dev. 4.4		

TABLE 14F
ESTIMATED NUMBER OF PEOPLE SEEN BY FLOAT FISHERMEN

Trail Users Observed

Number of People Seen	Frequency	Percent
0	251	91.9
1-2	9	3.3
3-5	4	1.5
6-10	4	1.5
11-15	4	1.5
16-20	1	0.3
21-25	0	0.0
26-50	0	0.0
51+	0	0.0
Mean 1.0	273	100.0
St. Dev. 2.3		

TABLE 14G
ESTIMATED NUMBER OF PEOPLE SEEN BY FLOAT FISHERMEN

Campers Observed

	Number of People Seen	Frequency	Percent
	0	55	59.2
	1-2	1	1.0
	3-5	4	4.3
	6-10	9	9.8
	11-15	6	6.5
	16-20	8	8.6
	21-25	3	3.2
	26-50	6	6.4
	51+	1	1.0
Mean	7.9	93	100.0
St. Dev.	14.7		

TABLE 15
EXPECTATIONS OF MEETING OTHER USERS

Group or Location	How Did The Number of People Seen Compare to Your Expectations														Mean * Score
	Far fewer than expected		Fewer than expected		About what I expected		More than I expected		Far more than expected		Had no expectations		Totals		
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	
Put-In	19	5.7	41	12.3	148	44.4	77	23.1	23	6.9	25	7.6	333	100.0	3.14
Take-Out	18	5.6	66	20.4	157	48.6	36	11.1	21	6.5	25	7.7	323	100.0	2.91
Float Fishermen	20	6.2	43	13.4	133	41.6	69	21.6	32	10.0	23	7.2	320	100.0	3.17
Bank Fishermen	66	20.1	100	30.4	102	31.1	23	6.9	9	2.7	29	8.8	329	100.0	2.36
Recreational Boaters	62	20.4	61	20.1	86	28.3	28	9.2	11	3.6	56	18.4	304	100.0	2.46
Trail Users	92	33.1	33	11.9	62	22.3	2	.7	3	1.1	86	30.9	278	100.0	1.89
People at Campsite	13	15.2	10	11.7	33	38.8	6	7.1	2	2.4	21	25.8	85	100.0	2.59

* Category "Had no expectations" was not used in calculating Mean Score.

TABLE 16
DESIRED ENCOUNTER LEVELS WITH OTHER USERS

Would Like to Have Seen

Group or Location	A lot more people		A few more people		Neither fewer nor more people		A few less people		Far fewer people		Totals		Mean Score
	#	%	#	%	#	%	#	%	#	%	#	%	
Put-In	0	0.0	4	1.2	190	57.1	98	29.4	41	12.3	333	100.0	3.52
Take-Out	1	0.3	5	1.5	220	67.5	64	19.6	36	11.1	326	100.0	3.39
Float Fishermen	0	0.0	9	2.8	182	56.2	82	25.3	51	15.7	324	100.0	3.54
Bank Fishermen	1	0.3	33	10.7	233	75.4	26	8.4	16	5.2	309	100.0	3.07
Recreational Boaters	3	1.1	10	3.6	205	74.1	23	8.3	36	12.9	277	100.0	3.28
Trail Users	10	4.0	20	8.0	196	78.8	11	4.4	12	4.8	249	100.0	2.97
People at Campsite	0	0.0	2	2.4	58	70.7	12	14.7	10	12.2	82	100.0	3.36

PART III

USER PERCEPTIONS OF PROBLEMS, MANAGEMENT TECHNIQUES, CONFLICTS, AND SATISFACTION

TABLE 17

PROBLEMS EXPERIENCED DURING RIVER VISIT

CATEGORIES	CATEGORY RANK
Not A Problem	1
Slight Problem	2
Moderate Problem	3
Serious Problem	4
Very Serious Problem	5

TABLE 18

ATTITUDES TOWARD MANAGEMENT ALTERNATIVES

CATEGORIES	CATEGORY RANK
Strongly Oppose	1
Oppose	2
Neither Support nor Oppose	3
Support	4
Strongly Support	5

TABLE 19

OBSERVED CONFLICTS BETWEEN USER GROUPS

CATEGORIES	CATEGORY RANK
No Conflict Observed	1
Slight Conflict	2
Moderate Conflict	3
Serious Conflict	4
Very Serious Conflict	5

TABLE 21

USER SATISFACTION WITH RIVER TRIP

CATEGORIES	CATEGORY RANK
Strongly Disagree	1
Disagree	2
Neither Agree of Disagree	3
Agree	4
Strongly Agree	5

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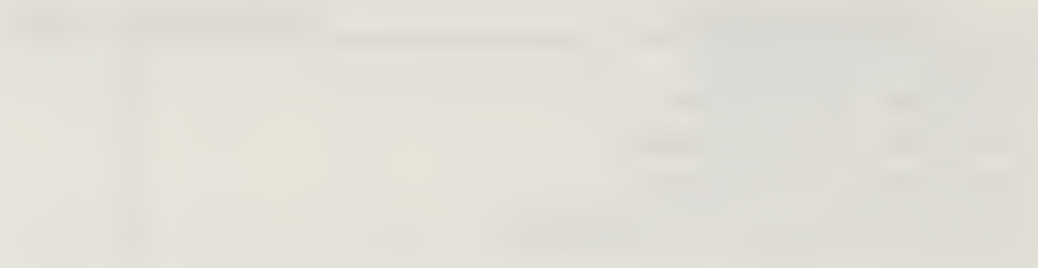

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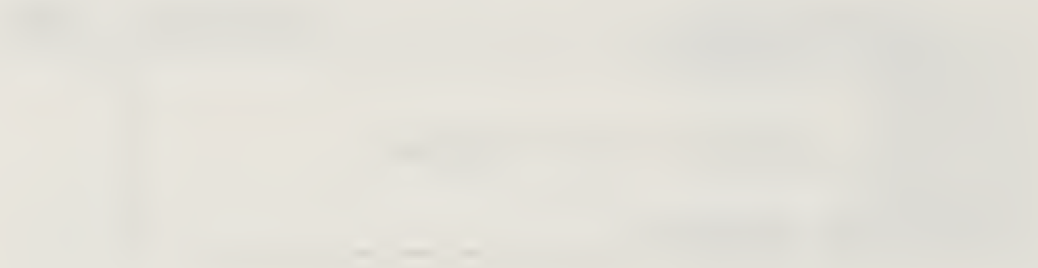

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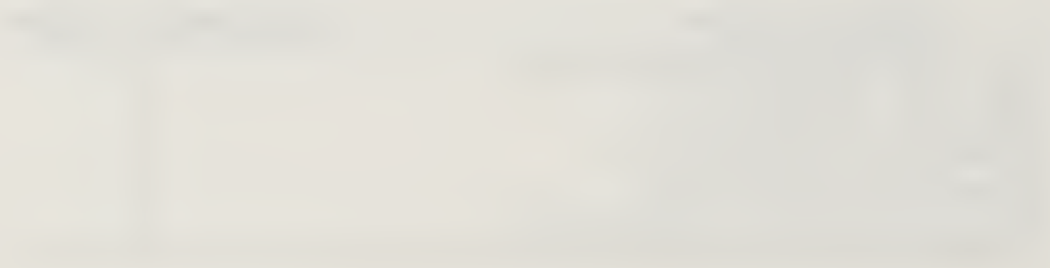

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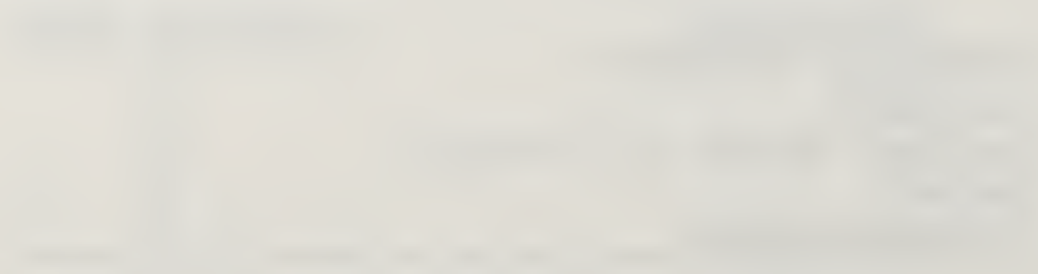

TABLE 17

PROBLEMS EXPERIENCED DURING RIVER VISIT

Problem Experienced	Not a problem		Slight problem		Moderate problem		Serious problem		Very serious problem		Totals		Mean Score
	#	%	#	%	#	%	#	%	#	%	#	%	
Litter in or along a river	244	71.2	68	19.8	26	7.5	4	1.2	1	0.3	344	100.0	1.39
Obstructions in river (logs, limbs, fences)	305	89.2	30	8.8	5	1.5	0	0.0	2	0.5	342	100.0	1.14
Too few drinking water sources	247	72.0	55	16.0	28	8.2	10	2.9	3	0.9	343	100.0	1.44
Too many homes or cottages along the river	253	73.5	35	10.2	29	8.4	14	4.1	13	3.8	344	100.0	1.54
Off-road vehicles in river area	272	79.5	33	11.1	19	5.6	9	2.6	4	1.2	342	100.0	1.34
People being inconsiderate or making noise	266	78.5	57	16.8	11	3.2	4	1.2	1	0.3	344	100.0	1.28
Too many people floating on the river	168	49.3	62	18.1	64	18.7	21	6.3	26	7.6	344	100.0	2.04
Motorized boats on the river	314	93.7	5	1.5	2	0.6	2	0.6	12	3.6	335	100.0	1.18

TABLE 17 CONTINUED

Problem experienced	Not a problem		Slight problem		Moderate problem		Serious problem		Very Serious problem		Totals		Mean Score
	#	%	#	%	#	%	#	%	#	%	#	%	
Utility poles and lines	302	89.3	25	7.2	11	3.2	0	0.0	1	0.3	339	100.0	1.15
Too many commercial establishments	302	88.8	20	5.9	13	3.8	5	1.5	0	0.0	340	100.0	1.17
Inadequate toilet facilities at put-in and take-out points	177	51.6	81	23.7	50	14.6	24	6.9	11	3.2	343	100.0	1.86
Too few toilet facilities along river between put-in and take-out points	225	65.7	62	18.1	30	11.1	11	3.2	6	1.9	342	100.0	1.57
Not enough law enforcement	249	73.7	34	10.1	29	8.6	10	2.9	16	4.7	338	100.0	1.55
Too much law enforcement	323	94.4	10	2.9	4	1.2	2	0.6	3	0.9	342	100.0	1.10
Roads within sight of river	277	80.0	41	11.9	21	6.2	3	0.8	1	0.3	343	100.0	1.27
Low flying aircraft	330	96.8	8	2.3	1	0.3	1	0.3	1	0.3	341	100.0	1.04

TABLE 17 CONTINUED

Problem experienced	Not a problem		Slight problem		Moderate problem		Serious problem		Very Serious problem		Totals		Mean scores
	#	%	#	%	#	%	#	%	#	%	#	%	
Too many signs along river	323	93.9	13	3.8	7	2.0	1	0.3	0	0.0	344	100.0	1.08
Too few signs along river	306	90.0	28	8.2	4	1.2	2	0.5	0	0.0	340	100.0	1.12
Inconsiderate bank fishermen	294	85.5	36	10.4	8	2.3	4	1.2	2	0.6	344	100.0	1.20
Inadequate information services (sign displays) at put-in points	246	71.3	61	17.7	23	6.7	9	2.6	6	1.8	345	100.0	1.45
Livestock	290	84.5	31	9.0	14	4.1	5	1.5	3	0.9	343	100.0	1.25
Human body waste	294	85.7	34	9.9	8	2.3	3	0.9	4	1.2	343	100.0	1.21
Theft of personal property	326	95.0	11	3.2	4	1.2	1	0.3	1	0.3	343	100.0	1.07
Navigation problems due to low water levels	217	63.4	72	21.1	40	11.7	4	2.0	6	1.8	342	100.0	1.57

TABLE 17 CONTINUED

Problem experienced	Not a problem		Slight problem		Moderate problem		Serious problem		Very serious problem		Totals		Mean scores
	#	%	#	%	#	%	#	%	#	%	#	%	
Inadequate brochures showing map of river, hazards, access points, etc.	245	72.2	47	13.8	33	9.7	12	3.5	3	0.8	340	100.0	1.47
Unskilled floaters using river	235	68.8	57	16.7	31	9.1	12	3.5	6	1.9	341	100.0	1.52
Poor quality campsites	250	81.9	30	9.9	19	6.3	4	1.3	2	0.6	305	100.0	1.28
Current mining activities	285	87.9	19	5.9	10	3.1	3	0.9	7	2.2	324	100.0	1.23
Too many people using trails	233	95.3	8	2.2	5	1.7	0	0.0	1	0.3	297	100.0	1.07
Existing campsites overcrowded	225	79.6	31	10.9	16	5.7	8	2.8	3	1.0	283	100.0	1.34
Campsite locations not clearly identified	228	80.3	35	12.3	17	5.9	1	0.4	3	1.1	284	100.0	1.29
Inadequate no. of campsites	236	81.6	35	12.1	12	4.2	5	1.7	1	0.4	289	100.0	1.26
Inconsiderate floaters	221	69.1	53	18.1	37	11.6	2	0.6	2	0.6	320	100.0	1.45

TABLE 17A
PROBLEMS OBSERVED ON RIVER VISIT

Problem	Frequency
Too Many Guide Services	3
Inadequate Launching Ramps	3
Improved Weather Prediction	1
Not Enough Law Enforcement	1
People Not Releasing Fish	1
Too Many Float Fishermen	4
Inconsiderate Recreational Boaters	1
Litter	1
Livestock Overgrazing Bank	2
Private Home Development	1
Barbed Wire Along Shoreline	1
Motorized Boats	1
No Grates on Fireplaces	1
Dam at Lake Hebgen	1
Lack of Information on Catch and Release Techniques	1
Lack of Firewood	1
Poor Maintenance at Kelly Bridge	1
Inexperienced Float Fishermen	1
Human Body Waste	1
Too Many Whitefish	1
	28

TABLE 18
ATTITUDES TOWARD MANAGEMENT ALTERNATIVES

Management Alternatives	Strongly oppose		Oppose		Neither support nor oppose		Support		Strongly support		Totals		Mean
	#	%	#	%	#	%	#	%	#	%	#	%	
Provide more points of public access to the river	107	31.2	102	29.7	40	11.6	73	21.3	21	6.2	343	100.0	2.41
Require more people to carry out their own trash	6	1.8	4	1.2	42	12.3	122	35.9	166	48.8	340	100.0	4.28
Provide more campsites along the river between put-in and take-out points	95	28.4	87	26.0	94	28.2	54	16.2	4	1.2	334	100.0	2.35
Prohibit motorized watercraft on the river	33	9.7	9	2.7	20	5.9	56	16.5	221	65.4	339	100.0	4.24
Post signs warning and advising of hazards	26	7.6	42	12.3	118	34.5	119	34.8	37	10.8	342	100.0	3.28
Provide more parking at access points	37	10.8	57	16.7	140	40.9	87	25.4	21	6.2	342	100.0	2.99

TABLE 18 CONTINUED

Management Alternatives	Strongly oppose		Oppose		Neither support nor oppose		Support		Strongly support		Totals		Mean
	#	%	#	%	#	%	#	%	#	%	#	%	
Allow wood fires only at designated spots	12	3.5	32	9.4	93	27.4	118	34.8	84	24.9	339	100.0	3.67
Prohibit wood fires altogether	53	16.1	119	35.9	116	35.0	24	7.2	19	5.8	331	100.0	2.50
Provide more patrols to assist river users and enforce regulations	17	4.9	39	11.5	129	37.9	105	30.8	51	14.9	341	100.0	3.39
Develop short hiking trails at points along the river	34	10.1	55	16.3	134	39.7	98	29.1	16	4.8	337	100.0	3.02
Prohibit off-road vehicles in the vicinity of the river, except on roads and highways	10	2.9	17	5.0	52	15.2	101	29.7	160	47.2	340	100.0	4.12
Improve existing access roads to put-in and take-out points	21	6.2	40	11.8	121	35.9	89	26.4	66	19.7	337	100.0	3.40
Be more aggressive in the enforcement of safety rules and regulations	15	4.4	26	7.6	156	45.7	83	24.4	61	17.9	341	100.0	3.43

TABLE 18 CONTINUED

Management Alternatives	Strongly oppose		Oppose		Neither support nor oppose		Support		Strongly support		Totals		Mean
	#	%	#	%	#	%	#	%	#	%	#	%	
Allow camping only at designated spots	10	2.9	23	6.8	50	14.7	134	39.4	123	36.2	340	100.0	3.99
Prohibit camping along the river	50	14.6	115	33.5	85	24.8	63	18.4	30	8.7	343	100.0	2.73
Restrict the numbers of people using the river at any one time	45	13.2	93	27.4	72	21.2	94	27.6	36	10.6	340	100.0	2.95
Allow unrestricted camping along the river	161	46.9	122	35.6	35	10.2	19	5.5	6	1.8	343	100.0	1.79
Provide campsites for river users at put-in and take-out points	38	11.2	78	22.9	99	29.1	109	31.9	17	4.9	341	100.0	2.96
Limit the number of people per group allowed on the river	42	12.3	75	21.9	96	28.2	94	27.7	34	9.9	341	100.0	3.00
Achieve better spacing among groups by assigning the time of day when each group may begin its trip	77	22.5	100	29.2	78	22.8	66	19.3	21	6.2	342	100.0	2.50

TABLE 18 CONTINUED

Management Alternatives	Strongly oppose		Oppose		Neither support nor oppose		Support		Strongly support		Totals		Mean
	#	%	#	%	#	%	#	%	#	%	#	%	
Improve the loading areas at put-in and take-out points	17	4.9	29	8.5	119	34.8	103	30.2	74	21.6	342	100.0	3.50
Provide more information along the river identifying facilities and points of interest	32	9.4	56	16.4	129	37.7	104	30.4	21	6.1	342	100.0	3.07
Provide more distance markers along the river	36	10.6	50	14.8	120	35.2	115	33.7	20	5.7	341	100.0	3.09
Have each group be assigned where they are to camp	54	16.2	96	28.7	115	34.4	53	15.9	16	4.8	334	100.0	2.64
Restrict the number of floaters using the river	49	14.5	71	20.9	64	18.9	106	31.3	49	14.4	339	100.0	3.10

TABLE 19
OBSERVED CONFLICTS BETWEEN USER GROUPS

Groups	No Conflict Observed		Slight Conflict		Moderate Conflict		Serious Conflict		Very Serious Conflict		Totals		Mean Score
	#	%	#	%	#	%	#	%	#	%	#	%	
Bank Fishermen and float fishermen	267	78.3	60	17.6	13	3.8	1	0.3	0	0.0	341	100.0	1.26
Recreational boaters (rafters, canoeists) and bank fishermen	260	77.4	44	13.1	17	5.1	10	2.9	5	1.5	336	100.0	1.38
Hikers and landowners	305	91.5	17	5.2	10	3.0	1	0.3	0	0.0	333	100.0	1.12
Recreational boaters (rafters, and canoeists) and float fishermen	257	76.1	54	15.9	11	3.3	13	3.8	3	0.9	338	100.0	1.37
Bank Fishermen and Hikers	322	97.5	6	1.9	2	0.6	0	0.0	0	0.0	330	100.0	1.03
Float Fishermen and Landowners	310	92.4	15	4.4	8	2.3	2	0.6	1	0.3	336	100.0	1.12
Different groups of trail users	315	98.5	3	0.9	2	0.6	0	0.0	0	0.0	320	100.0	1.02
Recreational boaters (rafters, and canoeists) and trail users	313	97.5	6	1.9	1	0.3	1	0.3	0	0.0	321	100.0	1.03

TABLE 19 CONTINUED

Groups	No Conflict Observed		Slight conflict		Moderate Conflict		Serious Conflict		Very Serious Conflict		Totals		Mean Score
	#	%	#	%	#	%	#	%	#	%	#	%	
Different groups of bank fishermen	292	90.4	22	6.8	7	2.2	2	0.6	0	0.0	323	100.0	1.13
Different groups of recreational boaters	286	90.5	23	7.3	5	1.6	1	0.3	1	0.3	316	100.0	1.12

TABLE 20
TYPES AND CAUSES OF CONFLICTS OBSERVED ON RIVER VISIT

Primary Conflicts	Frequency
Commercial Float Fishing Groups	9
Recreational Boaters vs Float Fishermen	22
Bank Fishermen vs Bank Fishermen	3
Bank vs Float Fishermen	15
Commercial Float Fishermen vs Private Float Fishermen	10
Landowners vs Float Fishermen	5
Overcrowding	2
Recreational Boaters vs Bank Fishermen	6
Recreational Boaters vs Recreational Boaters	4
	76

Primary Cause of Conflicts	Frequency
Too Many Guides	7
Recreational Boaters Inconsiderate	23
Lack of Fishing Manners	21
Inconsiderate Float Fishermen	3
Overcrowding	10
Barbed Wire	2
Landing Fish in Midstream	2
Attitude of Bank Fishermen	1
Inconsiderate Commercial Floaters	1
Too Many Bank Fishermen	1
	71

TABLE 21
USER SATISFACTION WITH RIVER TRIP

Satisfaction Measures	Strongly Disagree		Disagree		Neither Agree or Disagree		Agree		Strongly agree		Totals		Mean Score
	#	%	#	%	#	%	#	%	#	%	#	%	
I thoroughly enjoyed the trip	2	0.6	6	1.7	7	2.1	10	30.2	223	65.4	341	100.0	4.58
I was pleased by the job being done by the managers of the river	5	1.5	9	2.7	31	9.1	155	45.7	139	41.7	339	100.0	4.22
The river trip was well worth the money I spent to take it	4	1.2	10	2.9	25	7.4	113	33.7	184	54.8	336	100.0	4.37
I would like to come back and visit this river again	4	1.2	0	0.0	8	2.3	80	23.3	250	73.2	342	100.0	4.67

PART IV

BANK FISHERMEN PERCEPTIONS OF PROBLEMS AND MANAGEMENT TECHNIQUES

TABLE 22
PROBLEMS EXPERIENCED BY FISHERMEN

CATEGORIES	CATEGORY RANK
Not A Problem	1
Slight Problem	2
Moderate Problem	3
Serious Problem	4
Very Serious Problem	5

TABLE 23
ATTITUDES TOWARD FISHERY MANAGEMENT ALTERNATIVES

CATEGORIES	CATEGORY RANK
Strongly Oppose	1
Oppose	2
Neither Support Nor Oppose	3
Support	4
Strongly Support	5

TABLE 22
PROBLEMS EXPERIENCED BY FISHERMEN

Problem	Not a Problem		Slight Problem		Moderate Problem		Serious Problem		Very Serious Problem		Totals		Mean Score
	#	%	#	%	#	%	#	%	#	%	#	%	
Too few boat launch ramps	242	71.5	49	14.5	32	9.5	11	3.3	4	1.2	338	100.0	1.47
Too many commercially guided float fishing parties	195	57.8	64	18.9	38	11.3	22	6.6	18	5.4	337	100.0	1.82
Inadequate fishing regulation information along river	222	66.7	72	21.6	23	6.9	8	2.4	8	2.4	333	100.0	1.52
Too many private float fishing parties	241	71.5	56	16.6	23	6.8	8	2.4	9	2.7	337	100.0	1.48
Too many bank fishermen	297	97.9	25	7.5	14	4.1	2	0.5	0	0.0	333	100.0	1.17
Inadequate numbers of fish in river	212	63.0	55	16.4	49	14.6	11	3.3	9	2.7	336	100.0	1.66
Unskilled fishermen	248	73.6	56	16.7	25	7.5	7	2.0	1	0.2	337	100.0	1.38
Possession limits too restrictive	295	87.2	17	5.1	19	5.6	2	0.6	5	1.5	338	100.0	1.23

TABLE 22 CONTINUED

Problem	Not a Problem		Slight Problem		Moderate Problem		Serious Problem		Very Serious Problem		Totals		Mean Score
	#	%	#	%	#	%	#	%	#	%	#	%	
Inadequate fishing regulation brochure	254	75.8	53	15.8	19	5.7	6	1.8	3	0.9	335	100.0	1.36
Too many fishing wardens along river	330	97.0	4	1.2	3	0.9	3	0.9	0	0.0	341	100.0	1.10
Too many recreational boaters (rafters and canoeists)	263	77.6	37	10.9	24	7.1	8	2.4	7	2.0	339	100.0	1.40
Bait limitations (fly fishing only) are too restrictive	320	93.8	13	3.9	4	1.1	1	0.3	3	0.9	341	100.0	1.10
Catch and release sections are too long	301	88.8	16	4.8	14	4.1	3	0.9	2	1.4	339	100.0	1.21
Not enough large fish in river	614	49.2	59	17.8	63	18.7	28	8.4	20	5.9	334	100.0	2.04

TABLE 22A
PROBLEMS EXPERIENCED BY FLOAT FISHERMEN

Problem	Frequency
Changing Conservation Practices	1
Scavenger (Whitefish) Fish	3
Lack of Information on Water Level	2
Too Little Law Enforcement	4
Reduce Fish Kill	1
Entire River Should be Catch & Release	15
More Information on Camping	1
Too Many Small Trout	2
River Too Crowded	2
Lack of Emergency Supplies (First Aid)	1
Too Many Commercial Floaters	1
Unclear Fishing Regulations	4
Improve Launch Ramps	1
Too Many Tubers	1
Too Many Brown Trout	1
Lack of Trophy Fish	2
Possession Limits Excessive	1
Allow Fly Fishing Only	1
Ban All Bait Fishing	1
More River Access	1
Better Sanitation	1

TABLE 23
ATTITUDES TOWARD FISHERY MANAGEMENT ALTERNATIVES

Management Alternative	Strongly Oppose		Oppose		Neither Support Nor Oppose		Support		Strongly Support		Totals		Mean Scores
	#	%	#	%	#	%	#	%	#	%	#	%	
Reduce length of fishing season	102	30.0	109	32.2	100	29.5	25	7.4	3	0.9	339	100.0	2.16
Provide more boat launch ramps	79	23.4	99	29.4	87	25.9	62	18.4	10	2.7	337	100.0	2.48
Increase possession limit numbers	187	55.6	89	26.6	34	10.1	21	6.3	5	1.4	336	100.0	1.71
Decrease possession limit numbers	32	9.5	65	19.4	78	23.3	58	17.3	102	30.5	335	100.0	3.39
Emphasize fish stocking program	133	39.2	35	10.3	62	18.3	68	20.1	41	12.1	339	100.0	2.25
Limit number of recreational boaters (canoeists and rafters)	38	11.4	48	14.4	116	34.8	79	23.6	33	15.8	334	100.0	3.18
Close more of river to float fishing	107	31.9	133	39.7	61	18.2	21	6.3	13	3.9	335	100.0	2.10

TABLE 23 CONTINUED

Management Alternative	Strongly Oppose		Oppose		Neither Support Nor Oppose		Support		Strongly Support		Totals		Mean Scores
	#	%	#	%	#	%	#	%	#	%	#	%	
Open more of river to float fishing	41	12.2	57	16.9	102	30.4	87	25.9	49	14.6	336	100.0	3.13
Limit commercially guided float fishing	67	19.8	85	25.1	83	24.6	66	19.6	37	10.9	338	100.0	2.76
Encourage commercially guided float fishing	49	14.3	70	20.6	129	37.8	60	17.6	33	9.7	341	100.0	2.87
Periodically close sections of the river to all types of fishing	21	6.1	25	7.3	74	21.9	146	43.1	73	21.6	339	100.0	3.66
Shorten catch and release sections	149	44.3	93	27.6	58	17.2	29	8.6	8	2.3	337	100.0	1.97
Shorten closed-to-fishing sections on river	60	17.8	76	22.6	112	33.3	63	18.6	26	7.7	337	100.0	2.75
Establish restrictive regulation sections on river (such as catch and release)	6	1.8	17	5.0	55	16.5	108	32.3	148	44.4	334	100.0	4.12

TABLE 23 CONTINUED

Management Alternative	Strongly Oppose		Oppose		Neither Support Nor Oppose		Support		Strongly Support		Totals		Mean Score
	#	%	#	%	#	%	#	%	#	%	#	%	
Stock river with more fish of all sizes	131	39.4	33	9.9	68	20.4	68	20.4	33	9.9	333	100.0	2.51
Limit number of bank fishermen	89	26.5	116	34.6	114	33.9	14	4.2	3	0.8	336	100.0	2.18
Manage for larger but fewer fish	29	8.6	74	21.9	106	31.5	82	24.4	46	13.6	337	100.0	3.12
Manage for more but smaller fish	92	27.3	132	39.2	92	27.3	18	5.3	3	0.9	337	100.0	2.13
Reduce number of private float fishermen on river	67	20.0	116	34.7	103	30.7	33	9.8	16	4.8	335	100.0	2.44
Prohibit use of natural baits	12	3.5	24	7.0	39	11.5	69	20.3	196	57.7	340	100.0	4.21
Expand fishing season	36	10.6	61	18.2	167	49.6	54	16.0	19	5.6	337	100.0	2.87

PART V

SOCIOECONOMIC CHARACTERISTICS OF RESPONDENTS

TABLE 24
LEVEL OF EDUCATION

Grade Completed	Frequency	Percent
8	3	0.8
9	6	1.7
10	4	1.2
11	3	0.8
12	21	6.1
College		
13	28	8.2
14	27	7.8
15	16	4.6
16	65	18.9
Post Graduate	172	49.9
	345	100.0

TABLE 25
AGE OF RESPONDENT

Age	Frequency	Percent
15-20	24	6.9
21-30	46	13.3
31-40	114	32.9
41-50	62	17.9
51-64	70	20.2
65+	30	8.8
	346	100.0

Average Age 42.0
St. Dev 14.4

TABLE 26
GENDER OF RESPONDENT

Gender	Frequency	Percent
Male	302	87.3
Female	43	12.7
	345	100.0